



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------------------------|--------------------|-------------------------|---------------------|------------------|
| 10/809,790 | 03/26/2004 | Maurice Zauderer | 1843.0120001/AJK | 7155 |
| 26111 75 | 590 01/12/2005 | | EXAMINER | |
| • | SSLER, GOLDSTEIN & | SZPERKA, MICHAEL EDWARD | | |
| 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | ART UNIT | PAPER NUMBER |
| | | | 1644 | |

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Office Action Comments | 10/809,790 | ZAUDERER ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Michael Szperka | 1644 | | | | |
| The MAILING DATE of this communication a Period for Reply | ppears on the cover sheet with the | e correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perion - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b). | N. 1.136(a). In no event, however, may a reply be eply within the statutory minimum of thirty (30) on will apply and will expire SIX (6) MONTHS froute, cause the application to become ABANDO | timely filed days will be considered timely. om the mailing date of this communication. NED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | · | | | | | |
| 2a) This action is FINAL . 2b) ⊠ Th | nis action is non-final. | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) ⊠ Claim(s) 1-60 is/are pending in the application 4a) Of the above claim(s) is/are withdress 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) ⊠ Claim(s) 1-60 are subject to restriction and/or | rawn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) □ a | | e Examiner. | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the | • • • • • • • • • • • • • • • • • • • • | • | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a life. | ents have been received. ents have been received in Applicationity documents have been rece eau (PCT Rule 17.2(a)). | ation No ived in this National Stage | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) ☐ Interview Summa Paper No(s)/Mail | Date | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date | 5) Notice of Informa 6) Other: | al Patent Application (PTO-152) | | | | |

Art Unit: 1644

DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-19, drawn to a compound comprising one or more MHC class I $\alpha 3$ complexes that comprise an MHC class I $\alpha 3$ domain, β_2 -microglobulin, and a peptide, classified in class 530, subclass 387.3.
 - II. Claims 20-35, drawn to a compound comprising one or more MHC class I $\alpha 3$ complexes that comprise one or more MHC class I $\alpha 3$ domains, β_2 -microglobulin, and a costimulatory molecule, classified in class 530, subclass 350.
 - III. Claims 36-56, drawn to a compound comprising two or more MHC class I $\alpha 3$ complexes that comprise one or more MHC class I $\alpha 3$ domains, β_2 -microglobulin, and a multivalent compound, classified in class 530, subclass 391.1.
 - IV. Claim 57, drawn to a polynucleotide that encodes an MHC class I $\alpha 3$ complex, classified in class 536, subclass 23.1.

Art Unit: 1644

V. Claims 58-60, drawn to a method of immunizing an animal, classified in

Page 3

class 424, subclass 192.1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I-III and V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the method of Group V can be practiced with any of the products of Groups I-III.

- 3. Inventions I-IV are different products. These compositions contain different ingredients, require distinct process steps for their synthesis, and differ in their ultimate structure. Art on any one of these groups would not necessarily anticipate or render obvious the products of the other groups. Therefore they are patentably distinct.
- 4. Inventions IV and V are patentably distinct because a polynucleotide encoding an MHC class I α 3 complex cannot be used in the methods of immunization recited in the claims of Group V, since these claims require the presence of a polypeptide complex. Therefore they are patentably distinct.

Art Unit: 1644

5. Because these inventions are distinct for the reasons given above and the literature searches required for Groups I-V are not coextensive and Groups I-V have acquired a separate status in the art as shown by their different classification and

divergent subject matter, restriction for examination purposes as indicated is proper.

Page 4

6. This application contains claims directed to the following patentably distinct species of the claimed invention of Groups I-III. The species are the source of the cell surface marker utilized in the inventions of Groups I-III. Applicant is required to elect a cell marker surface source from the following:

- A) professional antigen presenting cell,
- B) tumor cell,
- C) epithelial cell,
- D) fibroblast,
- E) T cell, or
- F) infected cell.

These species are distinct because they differ in structure.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-5 and 15-19 generic for Group I, claims 20-24 and 34-35 are generic for Group II, and claims 36-40 and 49-56 are generic for Group III.

Art Unit: 1644

7. This application also contains claims directed to the following patentably distinct

Page 5

species of the claimed invention of Groups I and III. The species are the source of the

peptide used in Groups I and III. Applicant is required to elect a peptide source from the

following:

A) cancer cell,

B) infectious agent/infected cell, or

C) autoimmune disease.

These species are distinct because they differ in structure.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for

prosecution on the merits to which the claims shall be restricted if no generic claim is

finally held to be allowable. Currently, claims 1-14 and 19 are generic for Group I, and

claims 36-48 and 52-56 are generic for Group III.

8. Additionally, this application contains claims directed to the following patentably

distinct species of the claimed invention of Group III. The species are the identity of the

additional component(s) of the MHC class I α3 complex. Applicant is required to elect

an additional component from the following:

A) antigenic peptides,

B) costimulatory molecules,

C) cytokines, or

D) a combination of the above.

These species are distinct because they differ in structure. Note that if applicant elects D, applicant must indicate a defined combination (i.e. A+B, B+C, A+C, or A+B+C) for the election to be deemed responsive.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 36-48 and 54-56 are generic.

- 9. Further, this application contains claims directed to the following patentably distinct species of the claimed invention of Group III. The species are the identity of the multivalent compound used in the claimed invention. Applicant is required to elect a multivalent compound from the following:
 - E) avidin/streptavidin, or
 - F) a modified GCN4-zipper motif.

These species are distinct because they differ in structure.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 36-53 are generic.

10. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim

Art Unit: 1644

is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

- 11. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- 12. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

Art Unit: 1644

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Page 8

13. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Art Unit: 1644

14. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael Szperka whose telephone number is 571-272-

2934. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Christina Chan can be reached on 571-272-0841. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Michael Szperka, Ph.D. Patent Examiner Technology Center 1600

January 7, 2005

Patrick J. Nolan, Ph.D. **Primary Examiner**

Technology Center 1600

Page 9